

OUTLINE SHEET 4-10-1

Technical Manuals

A. Introduction

The knowledge of the use of the technical manual is crucial to the shipboard engineer. This lesson will give you an overview about the types of technical manuals and how to use it.

B. Enabling Objectives

- 4.27 **DESCRIBE** the parts of a technical manual.
- 4.28 **DESCRIBE** procedures in maintaining technical manuals.
- 4.29 **STATE** the types of changes to technical manuals.

C. Topic Outline

- 1. Introduction
- 2. Overview
- 3. Naval Ships Technical Manual
- 4. Formal Change
- 5. Formal Revision
- 6. Advance Change Notice
- 7. Technical Manual
- 8. Summary and Review
- 9. Assignment

ASSIGNMENT SHEET 4-10-2

Technical Manuals

A. Introduction

This material is to be completed prior to the material being covered in class.

B. Enabling Objectives

Refer to enabling objectives in Outline Sheet 4-10-1.

C. Study Assignment

1. Read Information Sheet 4-10-3

D. Study Questions

1. When there is conflict between the information found in the NSTM and a Maintenance Requirement Card, which document will be followed?
2. What is the difference between a formal change and a formal revision?
3. Who is allowed to sign on the Record of Changes?

INFORMATION SHEET 4-10-3

Technical Manuals

A. Introduction

This information describes the parts and use of technical manual.

B. Reference

Fireman NAVEDTRA 12001
Chapter 001 NSTM

C. Information

- I. The purpose of the Naval Ships Technical Manual (NSTM) is to provide technical information to personnel engaged in the operation, supervision, and maintenance of US Navy ships.
 - A. It contains detailed instructions that amplify US Navy Regulations and other authoritative documents.
 - B. It is NOT designed to be a collection of summaries of engineering information nor be able to cover all aspects of shipboard equipment.
- II. When conflict exists between NSTM and any other document, the document related to a specific equipment/system will take precedence until the issue is resolved.
 - A. Such conflicts shall be forwarded to NAVSEA using Technical Manual Deficiency/Evaluation Report (TMDER) for resolution.
 - B. TMDER is found at the back page of each chapter of NSTM.
 - C. NSTM contains preventive and corrective maintenance information of a general nature. It is NOT intended to take precedence over Planned Maintenance System (PMS) procedures.
- III. The NSTM is divided into chapters and volumes.
 - A. The NSTM consists of a set of approximately 100 chapters numbered between 001 and 999 in non-consecutive sequence.
 - B. Each chapter has a different topic and may have more than one volume in a chapter.
 - C. The NSTM is available in both paper and CD-ROM version.
 - D. The CD-ROM version contains the whole set of NSTM. The paper copy may be ordered in individual chapters or as a whole set.

- IV. A formal change is composed of one or more replacement pages for an existing chapter or volume.
 - A. It is intended for insertion into the appropriate document.
 - B. The information changed in a replacement page is identified with a vertical bar (change bar) on the outer margin adjacent to the text changed.
 - C. An illustration or table change is indicated by a change bar on the left margin of the title.
- V. A formal revision is a superseding issue of an entire chapter or volume.
- VI. An Advanced Change Notice (ACN) is prepared as an addendum to a chapter of NSTM when there is insufficient time to prepare and publish the permanent (formal) change.
- VII. Technical manuals specific to equipment/system are published by direction of Commander, Naval Sea Systems Command.
 - A. It is usually written by the manufacturers of the equipment/system.
 - B. When in conflict with the NSTM, it takes precedence over the NSTM until the issue has been resolved by higher authorities.
- VIII. Technical manuals contain information specific to an equipment or system. The parts of the technical manual include:
 - A. General Information
 - B. Operation
 - C. Functional Description
 - D. Scheduled Maintenance
 - E. Troubleshooting
 - F. Corrective Maintenance
 - G. Parts List
 - H. Installation
 - I. List of Illustrations
 - J. List of Tables
- IX. Changes to the NSTM and other technical manuals are done in the same manner.
 - A. The List of Effective Pages is a list of the pages that must be in the technical manual. It also denotes if changes were made in the effective pages.
 - B. The Record of Changes is used to keep track of:
 - 1. date and description of the change
 - 2. name of the person who entered the change
 - C. The pages that must be changed are removed and destroyed.

JOBSHEET 4-10-4
Technical Manuals

A. Introduction

The use of technical manuals to find information is a necessary skill that must be learned by all shipboard engineers. This jobsheet will allow you to practice locating information found in a technical manual.

B. Equipment. The following equipment is required:

1. Technical Manual NAVSEA 0948-LP-104-1010

C. References:

None

D. Safety precautions:

1. None

E. Job Steps: Answer the following questions using Technical Manual NAVSEA 0948-LP-104-1010:

1. What is/are the model number(s) of the valve/s that this technical manual is used for?
2. At the minimum, what are the safety precautions required prior to performing any maintenance or adjustments to this type of valves?
3. What is the weight of the 6-inch line size valve?
4. How often must the valve operating gear be lubricated?
5. What are the possible steps in fixing a valve that leaks internally?
6. Is grease used to lubricate parts of the valve during assembly?
7. What is/are the outside diameter/s of the shaft of the six inch valve where it mates with the bearing/s?
8. What is the part number of handle of the valve?
9. What must be inspected before the valve is installed?
10. How is the valve tested to ensure that it was properly installed?